

# MAGNETIC SEPARATOR



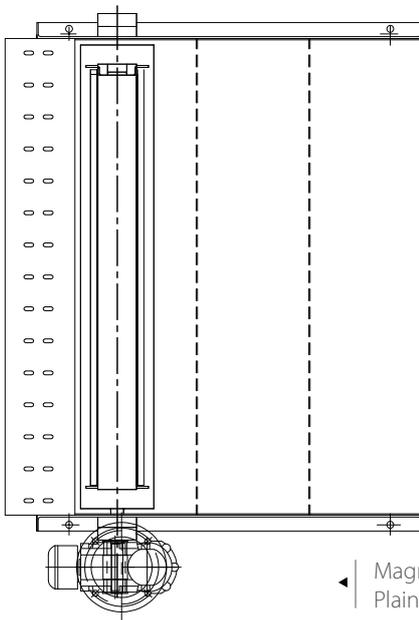
Magnetic separators remove iron particles from machine coolants. It consists of high-intensity magnets that remove not only ferrous fines but non-ferrous fines too, which act as a filter aid themselves. The magnetic separator ensures an uninterrupted flow of coolant supply to machines for precision grinding. It can be used for both water-soluble and oil (neat) coolants.

Magnetic separators are reliable, powerful, portable and serve a wide range of applications. These magnetic separators are highly recommended to be used as a pre-filter to limit contaminants reaching subsequent filtration equipments, if any.

## DRUM TYPE:

A magnetic drum with close dense magnetic field is assembled on non-magnetic SS shaft. The drum can be flat and finned type. Magnetic pole shoes are projected out to form fins, for better magnetic field alignment around the drum. The drum is rotated very slowly by a geared motor drive. A non-magnetic SS trough holds the dirty fluid close to drum. Magnetic dirt is picked-up by magnetic field & is attached to the finned drum.

**Filtration capacity of drum type ranges from 50 to 1000 LPM (13 to 265 GPM).**



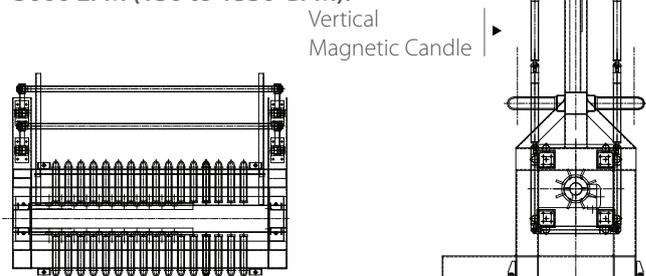
◀ Magnetic Separator Plain Drum Type

DRUM SIZES (mm / Inches)	MAX FLOW RATE (LPM / GPM)
100/4	500/130
150/6	600/160
200/8	1000/625
Magnetic separators are used in parallel for large flow rates.	

## CANDLE TYPE:

An endless belt of magnetic candles is dipped in the dirty coolant tank such that the dirty coolant enters into the core. Coolant flows slowly over the magnetic candles leaving ferrous dirt on the candles. The belt is indexed to pull out the dirt-laden candles and rotate them to the top to remove the dirt. The candles can be designed horizontally or vertically based on the type of application.

**Filtration capacity of candle type ranges from 500 to 5000 LPM (130 to 1330 GPM).**



Vertical Magnetic Candle ▶

## BENEFITS:

- Continuous operation to minimize machine downtime.
- No consumables needed.
- Improves tool life.
- Tapered disc for high magnetic concentration.
- Rare earth magnets can be used for added filtration efficiency.
- Ease of maintenance.
- Ideal for individual machines and can be used for centralized application.
- Systems are custom design to fit the space, coolant flow, viscosity of coolant and dirt load to be handled.



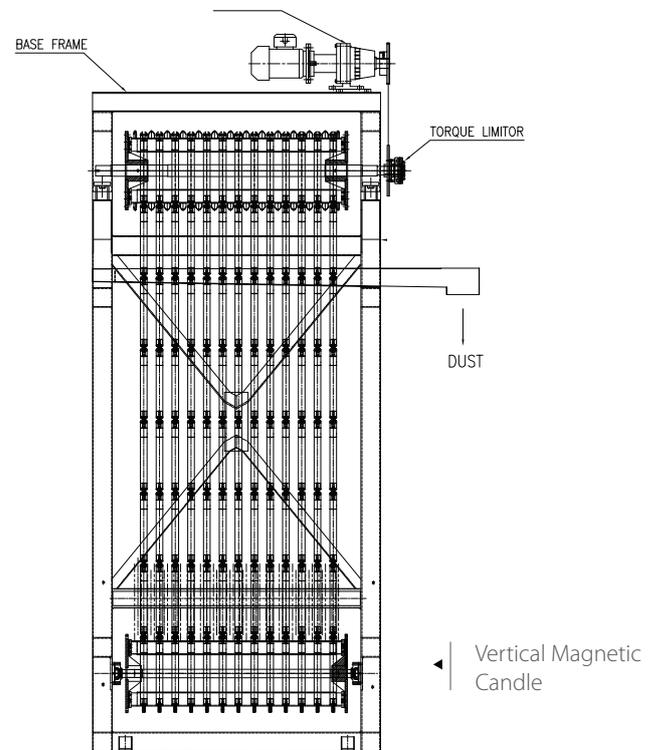
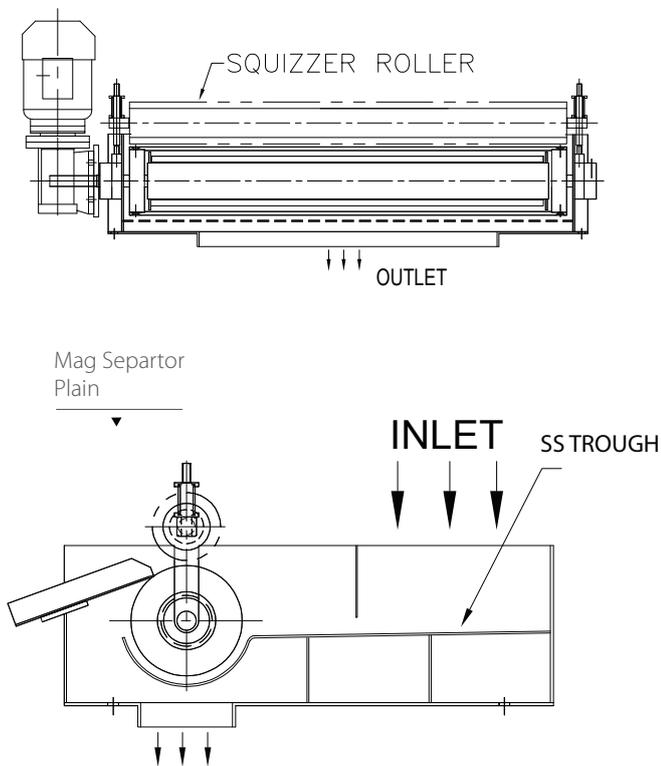
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Drum Type	Advantages
Flat magnetic separator	Suitable for fine particle separation with dry sludge with the use of rubber roller.
Fin magnetic separator	Suitable for finer particles separation.

Candle Type	Advantages
Vertical magnetic separator	Provides effective filtration and ease of operation.
Horizontal magnetic separator	Mainly used for lower flow rate applications.

**DRUM TYPE:**

**CANDLE TYPE:**



**APPLICATIONS:**

- ♻️ Internal & centerless grinding
- ♻️ Gear hobbing
- ♻️ Steel rolling mills
- ♻️ Honing, lapping
- ♻️ Milling
- ♻️ Machining centers
- ♻️ Gear cutting

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